TABLE 5.4.8.1–2.—*Projected Maximum Carbon Monoxide Concentrations Associated with Decreased Traffic Conditions in the Environs of the Livermore Site Under the Reduced Operation Alternative*

	No Action Alternative	Reduced Operation Alternative
Traffic Assessment [a]		
Peak hourly background traffic through intersection	3,757	3,757
Additional traffic related to alternative	62	-
Reduced traffic related to alternative	-	-187
Total traffic through intersection	3,819	3,570
Maximum One-Hour Concentrations (ppm)		
Near-roadway CO concentration [b] from:		
Background traffic	0.66	0.66
Increased traffic from alternative	0.012	-
Reduction in CO concentration due to decreased traffic from alternative	-	-0.036
Estimated background concentration [c]	3.5	3.5
Total traffic plus background	4.2	4.1
% of state ambient air quality standard [d]	21	21
Maximum Eight-Hour Concentrations (ppm)		
Near-roadway CO concentration from:		
Background traffic (ppm) [c]	0.46	0.46
Increased traffic from alternative [c]	0.008	-
Decreased traffic from alternative [c]	-	-0.025
Estimated background concentration	1.7	1.7
Total traffic plus background	2.2	2.2
% of state ambient air quality standard [d]	25	24

[a] Peak hourly traffic is estimated to be 10 percent of the total daily traffic passing through the intersection of Vasco and Patterson Pass Roads. This value (10 percent) is recommended by the air district for use when hourly values are not available. Local traffic patterns are discussed in Section 4.13.2.

[b] Concentrations are assessed for locations 25 feet from roadway for the year 2014. Assessment methodology is discussed in Section 5.1.8.1, and follows BAAQMD CEQA Guidelines (1999). Emission factors and ambient concentrations of carbon monoxide are expected to decline over time through 2010 due to improved emission controls on newer vehicles and reformulated gasoline. A negative concentration represent a net air quality benefit due to reduced emissions associated with decreased traffic.

[c] Background carbon monoxide is defined as that part of the ambient CO concentration that is not attributable to traffic sources from a nearby street or intersection. It is calculated according to procedures recommended by BAAQMD (1999).

[d] National one-hour ambient air quality standard is 35 ppm; more restrictive state standards, 20 ppm, is used. National and state eight-hour ambient air quality standard is 9 ppm.

BAAQMD = Bay Area Air Quality Management District; CEQA = *California Environmental Quality Act;* CO = carbon monoxide; ppm = parts per million.